



Golden Fleece Higher Education and the New Society of Third Millennium

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Abstract

A complex vision on higher education in the 21st century should not neglect the experience of two millennia of civilization, in which democracy and education have enhanced and sometimes even opposed each other, reflecting the contradictory nature of the human being. The democratization of knowledge has been a key component of the progress of civilizations, in a direct relationship with the social environment. Globalization has opened a market without frontiers for the education system, but this fact involves the risk of transforming universities from institutions molding the spirit and consciousness into institutions marked by the obsession for profit. The relationship between university-politics and university-moral in the contemporary world approaches the topic of academic discourse to avoid both conformism and negativity, emotional excitement, vulgarization and populist concessions, and focusing on the value of truth in a society that seems to accept a “relaxed cohabitation with a lie”. The responsibility of professors, researchers and students in promoting higher education based on moral values can create a new arbitration between power and knowledge, which would reconfigure a framework where each individual cannot just “be”, but also “become”.

1. Education: Expansion and Hostility

Almost half a century ago, Pink Floyd band had an explosive success with their song entitled “*We Don’t Need No Education*”. In 1968, students on riot in American campuses or in the great European universities were shouting, as democratically as possible, “*il est interdit d’interdire*”, militated against the Vietnam War. They were also protesting against famous traditional courses, such as archaeology or classical studies. In March 2006, in Paris, young rebel crowds had set cars and police stations on fire. They also set schools on fire and destroyed university buildings, starting with the Sorbonne, old symbol of the *Republic of Philology* in Europe and in the entire world. Consequently, democracy has generated today policies that have led to an unprecedented expansion of education as a system, and also to anarchical protests against the expanding system. Why has that been so?

Higher education for a democratic society in the 21st century is a topic we can talk about either in prefabricated and politically correct formulas or, on the contrary, we can profoundly reflect upon it in an attempt to comprehend not only what connects the two concepts – democracy and higher education, but also what might disconnect them and even contradict them. What do we, democratic university professors and staff, need to do if we wish these

two concepts to enhance each other? I believe that we should start by elaborating on a few theses, which we can then debate further. I would like to propose a few axes for this debate: the first refers to *upstream* education related to the academic stage, the way past and social environment that put a mark on the university; the second examines the contribution of universities to democracy within the societies which developed them – meaning *downstream* education, and the third would refer to universities themselves and their perspectives in a society of knowledge and of a real democracy, as we all undoubtedly desire.

We can understand that it is natural for any educational process to meet a certain resistance from its beneficiaries. We can understand that the European adolescents and youth aspire to have all the advantages of a competitive world, but they refuse uncertainties. We can notice that in a society that made higher education its main social elevator, education is challenged at the very moment when the elevator is no longer functional. We may become sad, or we can try to start the discussion over from its beginnings in the 19th century, a century that empowered education, and most particularly academic education, which proposed meritocratic system instead of favoring hereditary elites of the old aristocratic regime.

It may be possible that hostility against school, as it sometimes appears nowadays, arises because the educational system is disconnected from the realities of contemporary society. I do not refer here to the often called-upon adjustments to the labor market requirements. Numerous experiences and experiments have proven that the maximum adaptation to these exigencies is not fit for the young beneficiaries of an early specialized education – here, we talk about IT or other modern specializations; or, on the contrary, those who have passed through a formation intelligently centered on the traditional fundamentals of science and culture and who thus gain a flexibility that allows them to further choose the highest fields within the professional hunting field.

2. Reinventing School

In order to avoid these expensive confusions, we must reinvent the school so that it will know how to preserve itself and use its passionate interest for exploration of new knowledge. It must be a school that transforms every child's passion for stories into an ability to use adequate words. It must be a school that puts in service of the didactic process all the childhood colorful fantasies, and the explosive inventiveness of adolescence. Briefly, it is about a school that focuses on the joy of learning. Such a school integrates and does not compete with the almost infinite information, which means that today's society is developing fast. We will have to reinvent the school so that it will not exclude, but include. It would take into account every child's and teenager's talents, it would offer him or her a customized path that will develop his or her personality to the full. Under present circumstances, of an informatics and information revolution, the biggest effort necessary to reinvent the school radically is not one involving economic effort, but one concerning intellectual effort.

Universities that are, at the same time, beneficiaries of the educational process and its latest achievement, have the duty to reflect upon this vital issue and fight for a real democracy that is based on knowledge for a new humanism, capable of radically rebuilding our contemporary society.¹

Will this process be adopted by our democracies? Will the families, the local communities, the mayors, the local administration, the governments, parliaments, be willing to take the

chance to support and finance such a radical reform, to open the way to an adapted, flexible education, able to mould itself on any child's, adolescent's, adult's or the active third age's needs and potential?

3. The Argonauts and the Knowledge Adventure

One of the most fascinating legends of the world, *Argonautica*, tells the story of 50 heroes of Ancient Greece – amongst them, Hercules, Orpheus, Theseus, Castor and Pollux – who were sailing on Argo ship, built by Jason, who was claiming the throne of Thessaly, looking on the shores of Pontus Euxinus (today the Black Sea) for the Golden Fleece – symbol of wealth, power, and maybe even happiness.

Known especially from Apollonius of Rhodes's poem written in 3rd century B.C., the legend was seen as an initiating journey and interpreted either as a heroic action with the purpose of discovering new wealthy territories, or as a metaphor of knowledge, both supported with strong arguments.

The Argonauts' itinerary can be easily followed as the places where events happened keep, even nowadays, names related to the legend's heroes; and Strabo (60 BC – 24 AD), three centuries after Apollonius, described the land of Colchis, target of the expedition, as the place "where the gold of mountains is carried away by rivers".²

I myself have halted in most of the places mentioned; and in 1998, when I made my first visit to Georgia, I asked my host, President Shevardnadze, to facilitate a stop in Kobuleti, near Batumi, where the first stop made by the Argonauts on the Eastern shore of the Black Sea is stated to have taken place.*

As a geologist, the Golden Fleece of the ram Crius Chrysomallus was familiar to me and I understood that the expedition was the description of the first "gold rush", from south to north, as rivers with alluvionary gold are placed in the igneous and metamorphic rocks in the Carpathians, Balkans and Caucasus Mountains around the Black Sea on its West and South-Eastern side and are missing in the area of the Aegean Sea, where mountains are mostly made up of sedimentary chalk. The time when the legendary action happened preceded the "auri sacra fames" fever in the European Middle Ages, the "Western race" in North America and the frenzied expeditions in search of gold in Canada and Australia in the modern ages.[†]

Gold could not have been the journey's only practical target. Roman poet Publius Ovidius Naso (43 BC – 17 AD) exiled in Tomis (Constanța in today's Dobruja region), city founded by Greeks in the 7th century BC, has written again the story, with the specification that Tomis would have been the place where Aeëtes, king of Colchis, buried his son whose remains were spread by the Argonauts in the sea in order to have enough time to run through Bosphorus back home with the stolen prey. Over there, where the Istros (Danube) river was flowing into the sea, the Greeks were impressed by the golden wheat crops, another "Golden Fleece",

* In the area of Riom river, the old Phasis mentioned by Strabo, was found a big thesaurus of gold objects, after three decades of archeological excavations, in a place where Vani city was located in ancient times. Researchers led by Professor Otar Lordkipanidze from the Georgian Academy discovered gold objects weighing tens of kilograms, but mostly showed a remarkably refined art, that belonged to a local culture.

† During the first geological field applications in the Romanian Apuseni Mountains, a branch of the Carpathian Mountains, I saw the so-called "harchiu", a sheep fur laid stretched on an inclined area in the fast course of the river with alluvionary gold tiny pieces of gold were clinging to it. Then, they were washed again in a gold washing cradle, sort of a cherry tree pot in which by horizontal moves, sand is separated from the silt gold. It was mostly through this method, and not using mine galleries made by Romans, the Dacians (descendants from Thracians) have gathered the 350,000 kg gold treasury Emperor Traian carried to Rome as war trophy in 106 AD.

rising from a fertile land they did not have at home. The Greek merchants would use this wheat, cultivated by the Scythians, to feed their cities in the Aegean and Ionian Seas for centuries.

But could we reduce the legend of the Argonauts only to a historic process of colonizing the Black Sea shores, by the Greeks in Mycenae, which they called Pontus Euxinus? Have the heroes of so many myths, sprung out of a fantastic imagination, been brought together just for materialistic reasons, to assure food and accumulate wealth? Or is it about an extraordinary adventure of knowledge? And I do not talk about only discovering high mountains covered by perennial snow (Caucasus), a dark and cold sea (Black Sea), and a huge and large river (Danube) – different landscapes from the ones they knew until that moment. I do not refer here either to discovering foreign people, with unknown languages, religions or customs. Nor about the shock of meeting the Paleolithic and Neolithic Ages' culture and art, which are unexpectedly refined on these realms.

I am thinking about knowing the dark side of human nature. After all, what is so interesting about this legend? It is about planning a theft and making an association in view of an organized crime, as we would say using the contemporary juridical terms. The teller shows us deceit, betrayal, fratricide, committing horrifying crimes like when Medea slays her hostage brother and chops him into pieces, then throws him into water in order to delay the tentative of their unhappy father to retrieve his children and stolen goods. All these made under the blessing of Gods as perverted as people whose destinies they were governing. Why should we know these aspects of the human being? In order to understand that any educational process is a process of taming what Plato was calling “the wild part of the human being” and of bringing out, as Socrates was proposing through his “Maieutics”, its good side.

4. The University and the Citadel

Teaching, knowledge and skill are more precious than gold, and all roads are open to those who have gained the knowledge, wise Solomon warned us.*

That is what makes me think that in no global vision, which can create sparks when we address political, social or economic issues, should the University be left apart. It plays an essential role in shaping the future we aspire for, a future which cannot be separated from education and knowledge.

Sooner than any entity of the ancient world, Athens brought the academic community and the spirit of the Citadel in the circuit of perennial values. *Academos* and *Polis* are the fundamental roots of European vocabulary used in schools, literature, social and family life even today. The Greeks were among the first to perceive the virtues of academic dialogue to the benefit of propelling cities' policy.

Modern university, a creation of medieval Europe, proved to be the institution with the greatest influence on accomplishing intellectual education and human personality. Of the three powers recognized by medieval European society – *regnum*, *sacerdotium* and *studium* – political power, the first, has undergone profound changes; the second preserved its

* “Receive my instruction, and not money: choose knowledge rather than gold. They are right to them that understand, and just to them that find knowledge.” The Holy Bible, Containing the Old and New Testaments, New York: American Bible Society, 1999, *The Book Of Proverbs*, Chapter 8. The preaching of wisdom. Her excellence.

structure in the Roman Catholic Church, expanded all over the planet, but lost the monopoly of preaching Christian doctrine; only the third, *studium generale*, kept both patterns and its social role and functions throughout its long history. No other European institution had the force of attraction and radiation of a pattern widespread throughout the world, as the traditional European university did.

At first, the University was a corporation, a *universitas* in the meaning given by the medieval law, i.e. a community of students and magisters whose essential point was the search for Truth. It was not just about absolute truth, of Christian revelation, but about the complex truth, crossed by doubts and dilemmas of the human reason. In the University, ideas triumphed not one over the other, as it happens in ideologies, precisely because the fundamental vocation of the University is the Truth. Modern university has the merit of taking the confrontation of opinions and the freedom of speech outside its walls, of making them enter the human consciousness and behavior. It has the merit of proposing a certain way of treating human relationships to the society. Consecrated values, housed first in the University City, were gradually adopted as fundamental values of history's democratic age.

The academic milieu constitutes even today the most educated part of the civil society. However, the academic community seems, in a way, less connected to the present realities than the civil society generally. When the matter you work with concerns mainly past actions, the present becomes a time for researching the past with an eye to the future. The past and the future together are somehow inseparable. Indeed, the study of the past should remain pure archeology if it would not generate a project, if it would not become a challenge to potential wonders and interrogations and, ultimately, a memory of the future.

The University, conceived as a great forum, will last as a part of the democratic world as long as it will continue to promote critical thinking, reason, pluralism, human values. The confrontation of ideas in a critical, rational manner requires not only accepting the differences, but also paying the right attention to others' views. Because concepts and experience might become waste if there were no interest, interrogations and freshness of young thinking, to give debates color and to generate novelty, meaning the *creative technologies* the knowledge society needs.

5. Democratization of knowledge

In many documents and working papers, the term *knowledge* is considered to be universally understood, but in fact there are many competing significations on the market. Too many of these definitions confound information and knowledge, reducing the realm of knowledge to an accumulation of technical skills. Or, the significance of the concept of *knowledge* as a driving force of the contemporary world must be as deep as possible, in the most comprehensive, philosophical meaning of the term. Knowledge is a unique resource, never exhausted, but, on the contrary, increased both by use and by sharing.*

* In his Dissertation on the Canon and Feudal Law, published in 1765, one of the Founding fathers of the American democracy, John Adams, the first Vice-President and second President of the USA, wrote: Liberty cannot be preserved without a general knowledge among the people, who have a right, from the frame of their nature, to knowledge. . . . The preservation of the means of knowledge among the lowest ranks, is of more importance to the public than all the property of all the rich men in the country. . . . Let us tenderly and kindly cherish, therefore, the means of knowledge. Let us dare to read, think, speak, and write. Let every order and degree among the people rouse their attention and animate their resolution. Let them all become attentive to the grounds and principles of government. . . . Let us study the laws of nature . . . , contemplate the great examples of Greece and Rome. . . . In a word, let every sluice of knowledge be opened and set flowing.

In a work dedicated to the information-knowledge ration, I have supported the idea of looking at modern knowledge as *a territory of synergies* where each domain of research functions as a broth culture, a nourishing medium for the other domains of knowledge: history for the sciences of the Earth as well as geology for history, classics for physics, and ethics for biology or vice-versa.³

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Knowledge should never be reduced to technologies, research and development (R&D). It includes fundamental sciences, humanities, social sciences and education – all forming the ***culture of knowledge***. Modern knowledge cannot and should not be reduced to a technical compilation and use of information, but has to be coextensive to the depth and breadth of human wisdom accumulated through millennia. Bare information opens a royal way to massification, whereas knowledge stimulates the harmonious development of responsible individualities. There is no other antidote against de-humanization but an individual capacity for building information into knowledge.

That is why we need to offer the most gifted all the opportunities they need to blossom in their own field, and to exchange ideas in a variety of related areas: libraries, scholarships, internships, jobs. But we must also stimulate a dramatic widening of recruitment for the most innovative domains of science and creation. Historically speaking, such bursts of new human resources in the realm of knowledge were essential for the swift progress of humanity.⁴

Amongst the many theories that strive to explain the different rhythms of progress in world history, I think that the prize should go to those who consider that the *democratization of knowledge* is the basic component of the progress of civilizations. Think just for a second about the innovative force of the ancient Greek culture in relation not only with a new dynamic of social mobility, but also with the amazing accessibility of the alphabetic writing as compared to the hieroglyphs. Think about the invasion of new social forces in the realm of science in the 19th century, or of the acceleration in knowledge due to the generalized integration of women in all components of higher education.* These are examples motivating us today to identify new ways for integrating youth from the marginal areas of our own societies and of the world in general in universities.

6. Education: Costs and Benefits

When we refer to financing education, we should remind ourselves that the first character the Argonauts met on their journey was Phineus, who was empowered by Gods with the ability to predict the future, but later, the Gods, fearful of the power he might wield of this gift, blinded him. And thus Phineus, who could see the future, was no longer able to see the

* A hundred years have passed in a special conjuncture (discovery of Radium and the tragic death of Pierre Curie). Marie Curie had the chance to become the first woman professor in a European University (Sorbonne University), then the first woman accepted to be a member of the Academy (the French Academy). We often forget that in 19th century England, women not belonging to the aristocracy did not have the possibility to learn how to write and read.

present he was living in. Moreover, the harpies stole the food which was usually in front of him so that he would remain forever hungry! As Phineus was also gifted with the ability to find solutions for problems in the future, he suggested that the Argonauts chase away the harpies who tortured him. In return, he would teach them how to sail through the rocks of the Bosphorus straight, which were clashing against everything passing through the place headed to Pontus Euxinus. The story of Phineus appears to me quite instructive for those who have the mission to lead and reform the higher education system, who focusing on anticipating changes, might risk losing contact with the present or, even more, losing the necessary funds for achieving their visionary or strategic projects.

The issue of financing education could tame the budget *shrews* in an apparently paradoxical manner, meaning not by restricting access to studies, including higher education, but on the contrary, through a larger and democratic opening of the school gates at all levels. At least these will be the results if we take into consideration the projections published in a study made by McKinsey Consulting Company on education in the United States. The study takes as starting point the situation presented in a report in 1983, entitled *A Nation at Risk*, which was drawing attention even at those times, to the increasing mediocrity within American education. The McKinsey study calculates what would have been the possible earnings during the preceding 25 years had the measures put forth at that time been implemented. Had the United States attained the educational performance of Finland in 1998, the GDP of the United States in 2008 would have been higher by at least 1.3 trillion dollars and up to 2.3 trillion dollars. Had graduates from disadvantaged ethno-cultural groups such as the Afro-Americans and the Latinos reached their white colleagues' level from 1998 onwards in terms of performance, the GDP of the country in 2008 would have been higher by between 310 and 525 billion dollars, and had the difference between the quality of education for youngsters from families with poor income and the rest of the population decreased over 10 years ago, the GDP in 2008 would have risen by between 400 and 670 billion dollars.⁵

I do not know if such studies have been made for countries such as Hungary, Poland, Bulgaria, and the Czech Republic or even for Great Britain or France. What I do know, without any statistics, is that in my country there are many talented adolescents who never succeed in realizing their potential because of an unhappy combination of objective – basically economic related – and subjective situations, especially related to the family and social environment they live in, and those, for many reasons, do not offer them the enthusiasm, the motivation and the support necessary to perform in an educational system based on the 19th century principles of excellence, which were based on rigid evaluation criteria. These criteria automatically isolate those gifted with special artistic talents (a child having a perfect ear for music, but with no native talent for mathematics has no chance to become a prize-winning pupil in mathematics). Besides, despite the progresses in the social sector, the chances of those coming from a disadvantaged environment are low, depriving the progress of society.

There is no doubt – the most profitable investment is one made in the educational system, but under an essential condition: that financing should not just increase, but should also be correctly used. Not to restrain the democratic basis of academic institutions and communities, nor their contribution to the democratic development of society.

Education costs. But has anybody ever measured how much the lack of education may cost? I cannot provide an exact figure, but I can say for sure that the number of lives lost due

to dropping out of school early, to juvenile delinquency, or just to boredom and frustration, costs the entire society not only the unfulfillment of personal goals, but also a huge amount of money.

7. New and Old Imbalances

The research programs new EU member states accessed also bring about traditional lack of balance – between the “tough” and the “soft” sciences, between theory and practice, between the Anglo-Saxon and the continental European traditional system; last, but not the least, between the national element and the internationalization of higher education.

Seen from this perspective, the present financing system of the universities in Central and South Eastern Europe dramatically points out the inequalities inherited from the recent past. Even though the new democratic governments allocate 5 or even 6 percent of their GDP to education, we are talking about a share of modest GDP and about a system that has been poorly financed for decades.

From among such distortions, I will choose only the one that places at risk traditional fields of excellence in the Euro-Atlantic academic community. However we speak mainly about less expensive fields that need only a few books and a computer or even because of that, a great part of the humanistic sciences, particularly those situated beyond the acute up-to-date characteristics – to which are often subjected projections regarding the educational system and research – which are less and less supported in the study and financing programs. The history of civilizations, the languages of the old documents, the rare languages, and the history of philosophy may become, in today’s society, more and more endangered knowledge species. This happens also because of the power games played within the world of academic decision makers. In Romania, for 50 years, it has been constantly repeated that these represent “bourgeois prejudices”. Today, we see that in Western countries the decisions are being taken by the post-68 generation, with all its qualities and also with all post-colonial and post-modern prejudices. We cannot neglect the fact that it also happens as a consequence of democratizing the decisions in the education field, and of the pressure created by the labor market and the consumer society.

8. Memories from Communist Times

We, the university professors from the East, come from a very different background when compared to the world of open competition for grants. In the Communist regimes there was, of course, a struggle for power between political groups of the nomenclature, having branches within the academic world. Let me evoke here the example of sociology, forbidden for a period of time, later rehabilitated for a few years, and then isolated again from 1978. In its essence, the arbitrary distribution of the resources came from the ideological options of the Communist party. Thus, the massive support enjoyed by the technical sciences reflected a very simple idea: “the more engineers exist, the greater the production can be.” Back in the 1990s, 67% of the university graduates in Romania were engineers. The rest (33 percent) were physicians, professors, jurists, military people, artists, priests, according to the new requirements. On the other hand, during the Communist regime, a researcher could have been sure that, unless he broke the party rules, he could not obtain finance for the research he

wanted (or a modest, but comfortable, life of miming research with a big economy of effort), explaining thus some nostalgic feelings from within the academic field for the former regime. We had the opportunity to examine critically how the research and the university studies were organized in former East European Communist countries, where they were imposed on us through a political system we had not adhered to. But we also have the capacity to see the weak points of the competition-based system developed in the universities of the Western democracies.⁶

9. Academic Competition

The terms used within academic competition in the contemporary world distinguish many positive qualities, not least to mention limiting subjectivism, abuses, or the absurdities generated by the political guiding of intellectual life. However, it does not mean that we would live in a perfect world. But, far from it. I cannot deny the virtues of academic competition. In essence, this is an effect of democracy.* In Athens, not only great architectural projects of the Parthenon or the Propylaea, but also the well-known literary works written by great poets and playwrights in the age of Pericles were financially supported following a public debate in the People's Assembly. I wondered for a long time if Pascal would have ever won a research grant, no matter how small, given the present criteria. Especially, given that he did not write in English...

10. Shanghai University Ranking – A New World Championship?

One of the issues that concerns more and more visibly the academic communities in the world and the societies that developed them is, in the last years, the issue of *World-Class Universities*. The tough competition generated by globalization touched the academic world long ago and now this competition has elaborated its instruments, concepts and weapons, and has become obvious even in the eyes of public opinion, much more sensitive towards the Olympics environment, say even in boxing matches or basket-ball tournaments, interwoven between world university centers, than towards the essence of the issue: what entails being a worldwide competitive university? Why should we make the effort to enroll our own universities in this race and at what price?

It is not only about money, although we are talking about a great amount of money. The indisputable figures provided by a study undertaken by the World Bank in cooperation with the International Bank for Reconstruction and Development (IBRD) demonstrate an undoubted existence of a constant relationship between the level of general financing in the *Shanghai ranking* universities, professor's remunerations, research grants and the excellence of their results.⁷ Obviously, a research team that attracted huge grants in the past has all the chances to do so also in the future and a laboratory led by a Nobel Prize laureate will attract, most of the time for good reasons, funds beyond comparison and more significant than those allotted to a quasi-anonymous laboratory located in Eastern Europe.

* Once with the initiation of the European integration project, a series for inter-university cooperation programmes became operational: TEMPUS, ERASMUS, which supported universities from the former communist countries. Currently, the Marie Curie Actions aims to support long-standing prestigious Central European universities to preserve their status of centers of excellence. The fact that the European Union allotted the ELI-NP (Extreme Light Infrastructure - Nuclear Physics), the most advanced (and expensive) research project in the field of physics worldwide, to Universities in Central Europe, among which is the University of Bucharest through its Center in Măgurele, represents an excellent sign of a European integrative vision within the scientific research field.

The hierarchy of universities in the Shanghai rankings has not changed significantly since its first publication. Why is this hierarchy so rigid? An answer is provided by Adrian Bejan, a professor at Duke University, which is permanently present at the top.⁸ He developed the constructal law, and believes that ideas, human beings and education flow across the globe as water does in river beds. When a researcher appreciates and uses the work of an author, the idea flows from author to user. It flows “better” because of the long rooted history and geography of the flow network, which is due to the evolutionary process that led to a shared use of information at the present level of efficiency. This is why the user from one end of the globe seeks, finds, and trusts ideas to young professors educated in famous universities in other parts of the globe. There are many intermediate channels along each route: other universities, disciples of known professors, magazines, books, libraries, a hierarchical design that concentrates the main scholars in some schools. It is a design more efficient for the flow of ideas, one that spreads bright lights evenly over all schools. Members of the University Boards promising to change their rank by the simple theft of a name from a top university are defeated every time by nature. The same fate awaits those who want to change ranks by artificially building something big, as long as it is not required by the natural geography that created the university flows tapestry, covering our world. If size does not matter, age does. For older universities have dug the first channels that attract those who generate new ideas and develop disciples in order for those to produce and transmit new ideas further in the world and to the future. This does not mean that the future is closed to the others. Large groups, national priorities and well-equipped research centers overwhelm individual researchers. Managers and those with a thirst for reaching higher classification encourage this trend. However, the individual researcher will not disappear for the same reason that the invention of automobiles did not mean the end of walking, which still today is a good way to move in many circumstances. Similarly, insects were not replaced by birds as the global flow needs components of all dimensions.⁹

The rankings for universities of American origin or those similarly developed (Shanghai ranking) met legitimate objections since they were allegedly supporting some criteria at the expense of others, maybe equally, partially or through non-transparency. It seems to me that even more relevant are their inadequate characteristics in relation to the education systems based on a different kind of relationship with the society, as it happens to be in the case of the European education system.

That is the reason why in January 2013, the European Commission launched a new procedure for an international ranking of universities, stating that this “multidimensional” ranking of universities appears within the context of current approaches in the classification of university performances focusing “in a disproportionate manner” on excellency in the research field. The new classification will assess universities in five different areas: reputation in research, quality of teaching and learning, international orientation, the success of knowledge transfer (e.g. partnerships with enterprises) and contribution to regional development. It is to be expected that this will offer students and institutions a clearer image of the university performances and will help them choose the University best suitable for them.

I would like to draw attention to the fact that a risk might exist, on the lines that after the world states have been classified based on indicators specific to commercial enterprises, universities would be classified according to the same pattern. Ignoring traditions, mentalities,

social and religious behavior in favor of the Professional and Interpersonal Behavior Ranking (PIB), GDP (PPP), GDP (nom), Gini, HDI etc. lead to quaint rankings and may lead to wrong decisions even in the financial-economic sector. When speaking about universities, ignoring traditions, experience, as well as the relationship with national environment could lead to more serious consequences, as this approach affects not only diversity, but creativity in the end. Creativity is the basis of the new knowledge society.

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11. Market World versus Values World

We live in pragmatic times, dominated by principles of efficiency. A world of markets has been brought into discussion and is still a largely debated topic – either it is about goods, capitals or labor force. Certainly, the market world, which seems to have a solid present, will not have a viable future if it is not backed by world values. That is why I am convinced that it is essential for us to have a better knowledge of ourselves; we need to exchange and share more and more of our experiences and products, and the same holds true for an increasing number of professionals, students and pupils, more and more books, shows and exhibitions. We will thus discover what unites us. And so we will enrich the unique spiritual experience knowledge and diversity sharing offers us.

Beyond its right or left oriented ideological wrapping, totalitarianism has taught us a history lesson. Its failure is undoubtedly the failure of excesses made by state authority; it is blowing the cult of state, the omniscient, omnipresent and omnipotent state. Who would be more capable than those who learned this lesson, at the cost of infinite suffering, to rethink today citizens' sovereignty? It is about a principle placing the citizen at its center, and not a legal fiction which is the state, on whose behalf the greatest atrocities were committed.

Following this road further on, politics cannot be a way to organize relationships between friends and enemies; but on the contrary, it should be understood as the best way to be together, as a set of practices that are not intended to separate, but to unite all major components of society around a common project. This project must place human value at its core. By stating this, I only name the task the University knows to fulfill better than any other modern institution, as it has been doing for centuries.

The lesson drawn from the vitality of academic dialogues, education, culture, and amphitheatres and the balance of university citadels can be the counterforts, the new 3rd millennium society needs.

I cannot help myself from seeing how Universities are threatened and assaulted by market economy. Of course, as a man who has spent almost all his adult life in the university, I cannot

express myself against modernizing infrastructure and bringing certain performance criteria in university life. I think, however, that too much importance given to immediate effectiveness, as well as engaging faculty, departments and teachers in a restless race for obtaining financing would mean a risk diminishing very soon the original vocation of the University.

The University is not and should not become just some institution of the market economy. If such a thing were to happen, it would not be a place of freedom, reflection and debate, and the stakes of academic education – the human person – would significantly diminish. The need to modernize universities rapidly should not make us overlook the fact that any true university is a pillar of democratic society, so long as reason, pluralism and tolerance are values underlying its intellectual approach. Let us not sacrifice the quality of communitary relationships weaving between people involved together on the path of knowledge, on the altar of technology and market economy.

Pre-eminence of reason, freedom of conscience, tolerance and pluralism represent high *technology* that the University can provide to the New Society.

12. Brain Market

During the last decade of the 20th century it was often said that states' success in the global competition will not be primarily determined by the intensive use of natural resources, but by their level of well-educated human resources. Switzerland, Denmark, Japan are just classical examples, and now it is appropriate also for the United States of America, a country with intense exploitation of their natural resources. We can see that the United States has outsourced a large part of its industrial power (except military industry) as its military superpower will be less and less useable due to democracy spreading around the world. However, I believe that the US will continue to be a superpower in scientific research for a long time from now on.

How was this formidable American scientific power created? In the Middle Ages and during the age of Industrial Revolution, scientific theories and inventions created in the European universities generated human progress. The explosion of research in American universities occurred relatively late, during World War II, closely related to military orders, the first exodus of scientists running away from Nazi persecutions. It was followed by a powerful "brain drain" from Western European countries impoverished by war losses.

During the Cold War, the Soviets launching the Sputnik was a serious hit to the American ego, causing an impressive increase in financing basic research as well as a growth in the number of staff employed in the field. The superiority of the American system over the Soviets with regard to the scientific competition was seen not only in the cosmic race, but especially in the ability to quickly transfer space military technology into civil technology, for the benefit of U.S. citizens, as well as citizens of the entire world.

At the same time with the collapse of the Soviet empire, the biggest brain drain of educated people occurred from Eastern Europe to the West, especially to the U.S. During the last 25 years, the presence of researchers educated in East European universities with old cultural traditions has impelled creativity and diminished the effects of excessive specialization and of the European lycée superiority over the American *high school*.

I was often challenged to condemn the harmful effects this huge brain drain had over the former Communist countries and urged, as President of the National Council of Rectors and then President of Romania, to propose measures to limit it. My reply was that, at least in my country where during the Revolution in 1989 thousands of people gave up their lives for attaining freedom, brain drain should not be possible; and it is the duty of those who have remained in their country to produce reforms capable of making their country attractive to those who have made brilliant careers in the West to return.

It was much later that I realized that besides the moral approach, there is also a financial problem, one of funds invested in the education of these young people. If in the United States of America, universities enlisted in the *Top Ten* and the *Ivy League* are mostly private, in East European countries, and also in Western Europe (Germany, France) universities are funded from the state budget. If we take into account the amounts used to pay annual fees in the U.S., of approximately 30-40,000 USD for the Bachelor's, Master's or Ph.D. degrees, we realize the advantage American universities have from receiving researchers who obtained these graduation, Master's or Ph.D. diplomas in East European countries, where higher education in state universities is free of charge.

Although rapid, the post-1990 brain drain followed a certain sequence – professors (including myself), followed by lecturers, assistants, doctors, students attending doctoral courses, graduates and students – for recruiting to take place even among high school graduates with outstanding results. Only a small percent of them returned home. Unfortunately, this massive exodus on all levels exactly struck what was the most precious thing of Eastern European universities: *national research school*. Universities rightly called “national”, represented the place where novelty, experience and traditions were passed on from one generation to another and irradiated in the entire society. Let us hope that the amazing capacity for regeneration of Eastern intellectuals, proved by its survival after the physical decimation of scientific and cultural elites in Gulags of the 50s and 60s, will be functional this time too. For now, the effects of exodus are to be felt.

It is to be mentioned that meanwhile, after the end of the post-Communist transition, a new phenomenon emerged in the *brain market*: if during the first two decades we could talk about *grants* for outstanding Eastern students offered by Western universities, now, a rich class of oligarchs or even a middle class has appeared in the Eastern countries, and a new market has developed, a market for those willing to pay no matter how big the fees are for their more or less talented children to study in private American or British universities.

The paid recruitment system is rigorously organized: job fairs, advertising, credits, and part time job fairs. To hire graduates with diplomas, companies turn to *head hunting* in East European countries. A so-called visa lottery has been organized for immigrants trying to enter the USA whose only winners are, obviously, holders of diplomas useful for the US employers' fields of activity.

Of course, all the actions are transparently made and in compliance with market rules. Ancient indigenous rules – relationships, acquaintances, bribery – are not applicable. The slogan “You are not what you know, but who you know”, which is still applicable to these countries, is not applicable to intelligent industrious young people, who can build their individual careers in Western countries and decide their own destiny, which is admirable.

If the migration of specialists from Eastern Europe towards the West may be individually beneficial, in general terms, the massive import of “grey matter” with small costs from the East robs the high educated resources of these countries, leading to consequences that might become serious in the long term even in the field of education.

A special situation is related to migration of physicians. I am talking about this group as beyond the personal or group interest. The migration problem seriously troubles the current national health systems of former Communist countries in Central and Eastern Europe. Romania may be taken as a case study. According to official data, in 2014, 39,896 doctors were working in the health field in the country.* According to Eurostat, the average number of Romanian physicians per 1,000 inhabitants is 2.4 specialists, while the average number of doctors per thousand inhabitants in the European Union is 3.4. In spite of this discrepancy, the doctors’ migration rate from Romania to West European countries is 9% compared to the average European rate of 2.5%. After the last official count in January 2014, we find that over 25,000 physicians left Romania in the last 5 years alone. The President of the Carol Davila University of Medicine and Pharmacy in Bucharest recently warned that migration is also diminishing the number of professors teaching within the University and likewise is the quality of the pedagogical deed in the Romanian health education, which proved highly performant during the last hundred and fifty years by preparing highly qualified doctors not only for Romania, but also for several countries in Eastern Europe (as the former German Democratic Republic), Israel, the Balkans, Middle East, Maghreb or Latin America.

Coming back to the topic of financials, I would mention that the Romanian state spends 7,100 lei (2,132 dollars) per year for a student attending health graduation courses and 14,910 lei (4,478 dollars) per person for an advanced studies and qualifications. Thus, in order to prepare a graduate health practitioner (6 years), the cost is 42,600 lei (12,794 dollars) and for resident physician (3 years) the cost is 44,730 lei (13,433 dollars). The total amount rises to 87,330 (approximately 20,000 euros and 26,227 dollars). Professor Iaonel Sinescu, President of the Carol Davila University of Medicine and Pharmacy in Bucharest, had recently stated that the University he runs (one of the 11 health universities in Romania) receives for educating a class of physicians for 6 years, over 8 million euros (approximately 10,562,600 dollars). These amounts may seem insignificant compared to the money spent for educating physicians in the United States. Comparing the performances of doctors in Eastern Europe working now in clinics in the United States, it looks like there is no possibility to make a real difference between the quality of their professionalism. On the other hand, these amounts which may seem even ridiculous for Western people represent a considerable effort for the former Communist countries engaged in the line of reaching Western standards.

13. A Huge Business and its Risks

Higher education in the U.S. has been operating as a system relying mostly on a trade relationship between private universities collecting tuition fees, banks giving long term loans, the US administration paying interests for these loans and students who after graduation pay the loan in installments from the income earned after they get a job. It has been successful until today, producing a high percent of high educated youth; 42.5% of the US population

* According to the statistics data released by the Romanian Ministry of Health, 25,311 certificates of conformity have been released for physicians, dentists and pharmacists during 2007-2012, based on which they can practice in healthcare institutions all over the European Union.

has higher education studies, with an increasing rate of 1.4% per year, the USA topping the list of countries with highest education levels.¹⁰ This high percent of educated population has had beneficial consequences on the U.S. economic and social progress.

But in time, this system turned into a business whose huge dimensions could hardly be perceived even by countries in Western Europe with advanced education and economy systems. However, during the last few years this business has started to hit the young generation of Americans.

The Fed Bureau in New York announced in 2012 that the total amount of study loans increased reaching 956 billion dollars, 42 billion dollars higher compared to the previous trimester. According to the data presented by the BBC in 2013, the tuition fees paid by college students in the USA surpassed 1,000 billion dollars for the first time, with an average amount of loan per student increasing to 23,300 dollars; and *The Modesto Bee* writes that tuition fees in California's biggest Colleges surpassed 130 percent, approximately 5 times faster than inflation.¹¹

On the other hand, College Board of the U.S. Department of Education, Census Bureau, shows the increasing discrepancy between the cost of higher education in the U.S. and the evolution of the net average income of a graduate aged between 25 and 34 years old. While the cost of studies increased by 72% from 2000 till now, with an annual average rise of 5.6%, the average income of a young university graduate decreased by 14.7%, minus 1.6% a year on an average. According to the *Wall Street Journal*, in 2012, 284,000 college graduates, including 37,000 holding advance degrees who were registered in the U.S., were employed on minimum wage jobs and the *Huffington Post* writes that out of the 41.7 million working college graduates in the U.S. in 2010, 48% worked on positions that did not require a bachelor's degree.

Analysing this situation, several American researchers, authors of the paper "The Great Reversal in the Demand for Skill and Cognitive Tasks" have come to the conclusion that 2000 represented a turning point, when demand for cognitive tasks associated with high educational skills began to decline. This new reality triggered a first backlash towards loans made by students in order to pay for their education. For the moment, these are just "seeds of discontent" for a system which seemed to work flawlessly.

When you consider an educational system as a business you have to also assume the business risks. Thomas Frey imagined such a scenario for what he calls the "education industrial complex", which in the United States is represented by 4,495 institutions that share the tuition money paid by over million students. He made a prediction that by 2030 over 50% of the colleges in the United States will collapse. Colleges' ability to issue degrees gave them a competitive advantage any entrepreneur is looking for; it was easy to sell the idea of paying for a student's education today in exchange for some unknown monthly payment to be determined later. Good businesses attract competition. Due to the new alternative education options offered by companies (Coursera, Udacity and iTunesU) which started a new credential system, the number of enrollments in Colleges will decline. When revenues run short, the first instinct will be to arrange for short term financing. This, coupled with long term bonds and other obligations, will create a growing mountain of debt. Less expensive schools with extensive online capabilities will begin to "steal" students and colleges and will engage in

a pricing war to “keep their numbers up.” Universities will spend heavily on marketing to change their image and boost enrollment or even more on lobbyists in hopes of gaining more support from the government. With a 10% decline in enrollment per year, as well as a decrease in income, some of the present colleges will not financially last longer. In the business world, such declines are referred to as a “death spiral” and they are associated with layoffs, selling assets or mergers in order to assure survival; but the driving force to reflect the shifts in the United States’ higher education system will not be, in Frey’s opinion, just financial changes. They will mostly reflect students’ attitudes, expectations, and demands.

Although these predictions seem to look like a catastrophic scenario, I am convinced that appropriate solutions will be identified in the U.S., as it has always happened, and anyway, great universities in Ivy League or Top 100 will not be affected by these changes. However, I believe that in the globalized world, problems may occur where this model of American “education industrial complex” will be taken over by states which are not ready in the institutional and financial aspects and thus might lead to a financial crisis and totally unpredictable social reactions.

On several occasions when I was talking about building democracy during the post-totalitarian transition, I have pointed out that the American democratic system works not only because of the legislation and the institutions, but especially due to citizens’ democratic conscience. That is why I believe that in the current accelerated expansion of higher education at the global level, it would be useful to make a comparative analysis between the experiences of states in different regions of the world.

In most of the countries of the European Union such as Germany, France, Finland and Norway, private education’s share within the entire education system is extremely limited, and universities are funded almost exclusively from the state budget. In Turkey, private higher education had developed on a sound financial basis, especially in universities with English teaching courses and professors educated in prestigious universities in the U.K. and the U.S.A. An explosion of private education, that had developed in parallel with state education, is to be noticed in some former Communist countries in Eastern Europe, after the collapse of Communism. The business worked because it covered a shortage of skills required in the areas necessary for the transition to a market economy: management, law, political science and administration, journalism and communication. The business was profitable because these areas did not require expensive infrastructure, professors were teaching in state universities, and were poorly paid for second jobs and there was no investment in research. With regulatory legislation imposing rigorous quality criteria to be followed for diploma credits only few of them have survived.

Higher education is an issue concerning a complex relationship with the social environment. A report made by the Organisation for Economic Co-operation and Development (OECD) *Education at a Glance 2013* shows these particularities in the case of countries considered to have the highest education level.¹²

Thus, in Finland, where the percentage of population that has attained tertiary education is 39.3%, with an average annual growth of 1.7% and the annual expenditure per student in GDP of 6.5%, 96% of university expenditures are covered through public funds, compared to an average of 68% for OECD countries. In this case, the quality of higher education is

assured by the very high quality of high school and elementary school, proved by the results obtained in international tests. In South Korea, 40.4% of the population attained tertiary education, the annual growth rate is 4.9% and the annual expenditure per student in terms of GDP is 7.6%. Only 2.6% of adults with minimum studies of baccalaureate diploma are unemployed, less than in any other OECD country assessed, except Norway. Investments in research programs in universities cover a high percentage of GDP, though over 72% of research funds come from the private sector. Although Japan invests a lower percentage of GDP than most countries in the OECD, it manages to be a country with one of the highest percentages of people with higher education: 46.4%. With an average increasing rate of 3% per year, the rate of high school graduates is among the highest in the world, and 23% of Japanese obtained the highest marks in the toughest tests of literacy, which is twice USA's rate. Canada spends on a student attending a higher education institution a budget almost double than the OECD average, while having one of the lowest levels of unemployment in the world. A somewhat special case occurs in Russia, where more than half of the population aged between 25 and 64 years (53.5%) holds a university degree. Analysts noted a strong investment in education, but also a high level of corruption in higher education, where many students pass the exams without being present in classes and Russian politicians and billionaires buy their doctoral degrees easily.

The process of turning universities from molding the spirit and conscience of institutions into some “brain valorisation plants” seems to be a feature of our present. Maybe my way of thinking is too conservative, but the outlook for this process to grow and become generalized is terrifying to me.

14. Unemployment of Higher Educated Youth

The first decade of the 21st century for the European Union was confronted with a new problem – unemployment among young people with higher education studies. If the technological progress inured us to unemployment among industrial workers or among those coming from rural areas or unqualified workers in the public service, this form of intellectual unemployment has become an anguishing challenge. Who is there to blame?

In order to obtain a better insight of the phenomenon, we should leave away the general statistics and search the fields and professions where we have an extra-large number of specialists; and on the contrary, what are these fields with deficit of specialists? United Kingdom, Germany and France, European countries with highest level of economic and social development and with best universities, claim a shortage of specialists in fields like medicine, engineering, IT and teaching (mathematics, physics). This deficit is covered by university graduates coming mainly from countries which became EU members after 2004: Poland, Hungary, Czech Republic, Romania. And this is happening although the percent of faculty graduates from the total population is, according to Eurostat 2012 data, 34%, 27%, 24% in the United Kingdom, France, Germany, compared to 21%, 19%, 17%, 14% in Poland, Hungary, Czech Republic, Romania. On the other hand, the percentage of graduates is quickly increasing in countries of Central and Eastern Europe, when compared to the stable population (for instance from 7% to 14% in Romania) absorbed by West European countries, especially in these deficient areas.

In the existing European Union, out of 28 members, 12 are countries that, 25 years ago, were part of the Communist dictatorship regimes (to which is added former Eastern Germany). The total population of these countries amounts to 122 million people of a total of around 500 million. That is why I believe that we cannot ignore a comparison with the way higher education and employment were approached in these countries before 1989. We refer to a period in the history of those countries, of which today's youth are not aware of or if truth be told, are not interested in. In the Communist regime, unemployment was not tolerated. All citizens should have been "appointed" in order to control them. Everybody was working, including the hundreds of thousands of political prisoners from camps and gulags, forced to participate in building canals or working in lead mines, in exterminating conditions. Well paid positions were offered by the bodies of repression to a large number of people, and the party-state was opening a large number of positions for party activists (a structure parallel to the governance), through which the system was controlled. For all the others, University was the only chance for a professional career. The students were competing for the limited places available in higher education institutions, severely set by the Communist party for each profession and specialization. They were then studying with remarkable determination because, according to the total marks obtained when graduating, the graduates were acquiring an assignation which was to determine their career, lifestyle, most often for the rest of their lives. In the big cities, which were closed, one could not enter without an identity card released by the local police (*Militia*) unless one was granted a job and housing facility by the state. One could not exit the country he was born in, which was a kind of a bigger prison, without having the approval of the party bodies and of the *Security*. During the '80s, Ceaușescu, the dictator, even issued a law stating that all of those not having a legal occupation could be investigated and convicted for vagrancy.

The 1989 revolutions broke down these regimes and the citizens of the former Communist countries obtained their freedom and citizens of former Communist countries gained freedom. Today's youth have the freedom to make their life in a democratic regime the way they want it to be, to freely travel, to talk freely, coincided with the end of the monopoly of the state planned economy and its job appointments. At the same time, the strict planification of the number of students for each academic specialization was dropped, as well as jobs for the graduates according to states' interests.

15. 21st Century Jobs

The University cannot afford not to reflect seriously on its graduates' future and on the way it will find jobs in a fast changing society. This is the reason why the World Academy of Art and Science involved simultaneously in the virtual World University Consortium as well as in the project for a new paradigm in the 21st century. Shaping an image of the future world does not mean that we will necessary know the kind of jobs that will exist in the current century, but it means that we need to prepare ourselves for jobs that don't exist yet.

Predicting future jobs is an act imposed by the technological progress that would generate, undoubtedly, new types of jobs and will lead to the disappearance of some professional categories, a fact which was predicted by Bill Gates and which, according to several sources, might lead to the disappearance of 2 billion current jobs in the world, and which by 2030, will be taken over by automation and robots. Industrial progress as an engine of development,

will keep up the new generation's interest for engineering studies in universities. On the other hand, as long as it is not available as an alternative to the market economy, probably fields like business administration, accounting, and marketing will be of interest, even though work in such fields might be different from how it is nowadays.

Futurologists enthusiastically approached the topic of new jobs of the next few decades. One of the most famous futurologists, Thomas Frey, presented an opinion that 162 jobs existing today might be open even in 2030, which in my opinion is not an idea related to the classic field of futurology providing long term visions, but more like belonging to the field of short term strategies. Most of the 162 jobs proposed by Thomas Frey have titles which seem strange: Last Milers, Lending Tacticians, Fear Containment Managers, Failure Point Assessors, time hackers, time brokers, time bank traders, Brain Quants, Clone Ranchers etc.

The perception over these jobs becomes more explicit when the author places them into related fields like *Future Agriculture* with *Plant Psychologists & Plant Therapists*, and *Plant Educators*; *Bio-Factories* with *Gene Sequencers* and *Bio-Waste Optimizers*; *Atmospheric Water Harvesters*; *Contour Crafted Houses*; *Our Trillion-Sensor Future* with *System Anthropologists*; *Personal Rapid Transit Systems*; *Commercial Drone Industry* where there are predicted positions like *Drone Classification Gurus*, *Drone Traffic Optimizers* and *Backlash Minimizers*; *Driverless Everything*; *Crypto Currencies & Alternative Financial Systems* with *Crypto Currency Lawyers*; *Micro Grid Conversion* having *Secondary Opportunity Expansionists*; *3D Printing*; *Big Data* to have positions like *Waste Data Managers*; *Internet of Things* would have *Lifestyle Auditors*; and the *Senior Living* sector - *Life-Stage Attendants*. The author of the article also mentions even more sophisticated fields like *The Sharing Economy* with *Involvement Specialists*; *The Quantified Self*, having *Guardians of Privacy*; and even *Creating the God Globe* requiring the existence of *Inflectionists*, those who can pinpoint the optimal intersection of time, place, and information for change to occur.

What seems relevant to me is the fact that in a world more and more controlled by technology, the interest in maintaining positions involving human contribution is very high. Among these new skills are: *Transitionists* – Those who can help make a transition easier due to their analytical and organizational skills; *Expansionists* – road opener of the evolutionary tendency, *expansionists* are those who have the talent for adapting along with a growing environment, *Maximizers* – people having the ability to take advantage of processes, situations, and opportunities, the *maximers* use circumstances on their advantage for best results; *Optimizers* – The skill and persistence to tweak variables until it produces better results; *Dismantlers* – Every industry will eventually end, and this requires talented people who know how to scale things back in an orderly fashion; *Feedback Loopers* – people who can devise the best possible feedback loops; *Last Milers* – in their attempt to reach a maximum utility for the end user, technologies will reach a point of diminishing returns. People with the ability to mastermind solutions to pass to the “next best thing” will be in hot demand; *Contextualists* – every technology will have a specific image and a big picture. *Contextualists* will set the operational procedure of new technologies taking into account firstly the context; In between the application and the big picture lays the operational context for everything new; *Ethicists* – in an age of technology, where moral standards change, there will be ever-growing demand for people who can question complex situations.

Gladly, all futurologists agree on the fact that *Theorists* will still be needed, as every new product, service, and industry begins with a theory.

In the end of this outlook on future jobs, I chose one of Thomas Frey's conclusions published in his article dedicated to the future of colleges and universities: "Preparing humanity for world's unknown means preparing our minds for thoughts unthinkable, and preparing our resolve for struggles unimaginable."¹³

16. Professors' Responsibility

The crisis today's world faces puts a question mark over a large number of options that the last half century took for granted, and forces us to reflect on how far our own choices have somehow contributed to the aggravation, if not even triggered the global crisis. If we agree that behind the rotten loans, of imaginary money balloon, of artificially inflated shares on the stock market and of all forms of speculation that caused the current collapse of the banks and the economy, a common factor could be perceived - a serious crisis of values I think, then I believe that our responsibility as academics, as administrators of academic institutions and as intellectuals is undeniable. We all participated in the last few decades, even if through resignation, in a vast process of massification of education, more and more dominated by the economic obsession for immediate profit, and less and less concerned with the educational value of disinterested knowledge. We have accepted that a knowledge based society can be created, but almost completely lacking in philosophical contemplation, fundamental theoretical knowledge, interest in the history of concepts and values of our own society. We have accepted, on behalf of an illusory practical efficiency, the dehumanization of research activity, a damaging subordination of the asymptotic search for Truth to the benefit of mass series production of convenient truths. Like bankers and investment funds managers, we have sold illusions, too.

17. Students' Responsibility

During the last two decades, Freedom and Democracy have created a new problem: the difficulty of choice. It is often said, not without justification, that choosing is even more important than the choice made. Responsibility thereby falls on those who wish to prepare their future through university studies. It is about the courage of choosing and the strength of wanting to find out what you can become, that are crucial elements in a world whose future we cannot know in detail, but we can anticipate its main direction, including potential dangers and risks. Young people can now choose a more difficult job or an easier job. Studies are more fastidious, more pleasant or easier. Statistics show that an increasing number of candidates with university diplomas chose the easiest way. In the UK, young English people avoid Faculty of Medicine because studies that are made for a longer period of time are difficult and medical profession has risks and restrictions. In Germany, the cradle of technical sciences, the number of local candidates in technical universities is on a decreasing trend, and Germany has to import engineers and IT specialists from Central and Eastern Europe. However, there is an inflation of degrees in the fields of Communication, International Relations, Political Science, even if it is obvious that their holders will find jobs in these areas with an increasing difficulty. On the other hand, the exact same profession can now be made in difficult circumstances, in remote areas or, more comfortable and nicer, in ultra-civilized

centers. There will always be jobs for physicians, engineers or professors in the rural or remote areas from the large cities, meaning exactly the place where they are most needed.

In an open competitive environment, on a large common labour market, such as the European Union, and in the globalized world at large, unemployment of university graduates will also depend on the way each young person choosing a university specialization understands that he is the main character of his own life scenario, and the University should train him for difficult confrontations with social obstacles and with himself.

18. Globalisation of the Technological Progress

The globalization of technological progress involves two observations. First, the transfer of scientific and technological progress cannot take place without a transfer of the skills needed to use it, and even more, in the lack of a system of values to lead to a good use of it. The second observation: the gaps between rich and poor, or between advanced and backward technologies, are not coextensive with those caught in between human potentials. The situation of the countries in Central and Eastern Europe clearly demonstrates that despite local delays that occurred during the last half century, training networks however were maintained and allowed the survival of cultural and intellectual potential without regard to material resources, seriously affected by an aberrant policy, a potential providing the breeding ground for a rapid development.

Challenges of technological development put enormous pressure on human resources. I do not think I'm wrong when I say that the issue of training and development of human resources represents a key issue for humanity, because there is no technology to produce men and women who use it. It is necessary for us to convince policymakers of an obvious, but often neglected fact: the social costs of gaps in education are infinitely greater than the costs involved in quality education.

19. Globalization Ethos

A borderless world in education involves, as I have already said, redefining institutions. We need to prepare graduates with global competencies, who will be able to act in accordance with the local, religious, technological and cultural environment. We must not forget that problems have their roots in globalization. Global issues, often diseases, require global responses. The slogan *Global versus Local* is not a geographical definition, but a reasoning and a means of action adjusted to local issues, but with global impact. Globalization associated with democratization cannot be regarded as an exclusive Western product anymore. Modern technology is indeed a product and a consequence of the concentration of scientific production in the West. Globalization seen as a response to global problems forces Western technology to take into account local specificities and seeks global solutions. But in order to build a new concept of global solidarity in the field of higher education, we must be able to see globalization not only in its technological aspect, but also in its anthropological one. Only then we can reach the globalization *ethos*.

Globalization cannot be assimilated to simple trade or homologation of goods on the free market dynamics, of the most competitive products. Beyond this, globalization is the consecration of some universal values and symbolic goods; it means knowledge and, therefore,

closeness and understanding. In a speech addressed to the academic community at the Prague Castle, His Holiness Pope Benedict XVI warned that the massive increase of information available and technology also raises the trend of dividing reason from searching for the truth. If on the one hand, times of interference derived from the political totalitarianism passed, isn't it true, on the other hand, that nowadays the act of reasoning and academic research are often and subtly constrained to bow in front of the pressures made by groups of ideological interests and in front of the consideration for short term utilitarian purposes? What would happen if our culture would have to be built only on arguments en vogue at a certain moment and with little relation to a historical intellectual tradition or built on promoted beliefs, which are very noisy and strongly financed? Our societies will not become more rational, more tolerant or flexible, but more fragile and less and less inclusive, becoming distant from what is true, noble and good; and suggests that the analyses of skills and the ones required to formulate a scientific hypothesis combined with the cautious art of discernment offer an efficient antidote for their self-centered attitudes of non-involvement or even alienation, which are present in the welfare societies which might strike especially the youth. * The extraordinary movement in which we are all involved should not make us forget that behind every action, there is man. Over 2,000 years ago, Protagoras said: "Man is the measure of all things".

20. Globalisation of Education

I believe that globalization should not be considered only an egalitarian force in the negative sense as is very often the case nowadays. Technological and knowledge imperialism, promotion of the consumption culture or supremacy of the English language to the detriment of cultural diversity and national identities, are realities that generate, for good reasons, opposite reactions. However, there is here a positive meaning, too: equal opportunities are now available to the young generation. Globalization has opened a borders-free market of the educational system. At the same time, it has offered a communication infrastructure where space or time is no longer important. In order to place a value on this opening it is necessary to move on from reforming the institutions to redefining them. The educational process can be compared to a tree. If mobility were the tree top, and its roots, a network of domestic and international institutions, then the tree trunk must be made up of a new strategic organization of information that would valorize the critical mass of fundamental knowledge. But how?

21. Double and Triple Propeller

In a Report to the Club of Rome, published in 2003, the well-known Triestine economist and thinker Orio Giarini launched together with the Romanian academician Mircea Malița, Professor of mathematics at the University of Bucharest, the concept of "Double propeller of education and work"¹⁴ in which they were stressing the unity and relationship between education and work. This double propeller of education and work can be functional only if it follows two principles: a multi-disciplinary profile and lifelong education. Along with the Bologna process, and once the license/master/doctoral degree (LMD) system has been generally adopted in Europe, including in the new EU member states in the Central and South Eastern Europe, *lifelong education* will have been officially implemented. The Bologna

* Speech delivered by His Holiness Pope Benedict XVI addressed to the academic community at the invitation of Prof. Václav Hampl, Rector of Charles University in Prague, Prague Castle, September 2009

system offers students in Eastern Europe the possibility of mobility during their university studies and facilitates faster access to the European labour market. As negative effects, I must mention a decrease of the education quality, which affected especially the Eastern elite universities. The last decade's experience shows that the multi-disciplinary profile has not yet escaped the tyranny of disciplines and of the research institutes' caste mentality. A solution for surpassing this situation would consist in an offer to be addressed to the young generation to present an outlook on professions, where part of the classical disciplines are replaced by modules that allow a personal study itinerary able to make up personalized curricula. The professors should become more than prestigious entities of the research world, that teach courses and give grades. They would rather be tutors and models, reviving the old European tradition of schools' founding fathers. It is necessary for us to create, both in the educational system as well as in research, new playgrounds and new games amidst which university presidents have the ability to manage interactions. The organizational background should also change within the context where the fight for talent recruitment becomes global, and jobs are accessible through the Internet. As a consequence, managing talents becomes more of an art than a profession.

In 2013, Ivo Šlaus was rightly reminding us about the social dimension of humanity, and said that, in addition to learning and working, which can be individual activities, it is necessary to extend this double helix adding realization of human rights and duties – governance of human societies – which would condense into: “*Triple Helix of Education, Employment and Governance*”.¹⁵

22. University Beyond the Walls - Inside of Outside

Under the European context where Universities are funded by the state budget, there is a danger for the *government* sector (the third propeller), as put forth by Šlaus, to be mostly associated to the central administration. In the U.S., where elite universities are private, the relationship with local communities has a tradition that is largely missing in Europe, which is why the risk is smaller. This was the reason why, in my project *University beyond the Walls - Inside of Outside*, I have proposed together with Professor Dan Grigorescu for the WAAS Center within the University of Bucharest and which addresses the academic communities in the Europe – Mediterranean region, a collaboration with local communities rather than with governments. I have chosen the *geopark* as instrument for implementing this project. The experience of the European Geoparks network under the auspices of UNESCO, which valorize together natural and cultural monuments, offers encouraging examples of good practice. The expansion of the University-communities' collaboration opens interesting perspectives for innovative developing strategies initiated in the triple helix concept. I mean adding to the old functions of university as “diffusers of knowledge”, “creators of educated human resources” or more recently, “producers of technologies” to function of “non-formal education” with the purpose of developing entrepreneurial skills of individuals and organizations through ideas and business incubators at the local level. In addition to the objectives targeted in the past, getting new features, services and jobs for graduates and students in *part-time* system, this can raise the visibility of the academic milieu in the Society and an increase in the social cohesion. In order to achieve the success of this goal of social inclusion, where universities can take over the role of initiator and coordinator, a holistic approach is needed through changing

the type of intervention from the “transactional” way limited to a certain action, to the “transformational” way focusing on programs with larger and longer duration.¹⁶

23. A Cultural Initiative for Global Peace

Such a major program might be developed around the project *Rediscovering Levant, Cradle of Culture, Religions and Science*, which I had launched on behalf of the Institute for Cultural Diplomacy in Berlin. The project goal “culture of peace through understanding the other” envisages as implementation tool the creation of a *network* between UNESCO accredited geoparks in the Levant-Mediterranean area, a region with fertile contacts for millennia. I think it is a good opportunity for universities in the region, and not only for them, to approach a new reading perspective on the history of the Levant, which was so far seen considering wars and conflicts, rather than its common myths and traditions.

This vision is addressed to the younger generation which, liberated from the burden of the old adversities, can now engineer a new solidarity. The fact that WAAS has adopted this initiative is an encouraging step towards achieving an action plan for a culture of peace. The culture of peace is a fertile ground where we can grow a new culture of democracy and a new culture of free market, without which the project of a New Society has little chance of success.

24. Prospective Mission

We live in a world which seems to prove the triumph of democracy, freedom and cooperation, an open world, a world of constant communication and interaction, a world whose perpetual motion cannot be stopped and where isolation would mean a form of collective suicide. Yet, this world is not yet ready for globalization. If we want to understand what would be the right moment for us to turn to the University’s prospective mission, we need to understand that it is the moment when the university should find in itself the necessary resources to give a new impulse to the world we live in.

Academic institutions’ identity and their role within the assessment of 21st century challenges no longer need to be demonstrated. Specialists whom we educate today will be active until 2050-2060, so their projective capacity represents an indispensable component in this process. In this sense, adopting a development strategy requires a few prior clarifications regarding anticipation: the general framework of the society’s evolution, the forecasting of supply-demand ratio of the academic capitalization valorization, the assessment of human potential and material resources.

My generation left many questions unanswered. I have no regrets, if a new generation will ask the same questions. The answers will undoubtedly be different from the ones we would have delivered, as the world we used to live in has changed. We sought answers to what we hoped to be a world of certainties. The only thing we know for sure today is that this world will be a world of uncertainties and that answers to the exact same questions will change more rapidly than we could have imagined. Professors, researchers and university graduates are, today, the measure of future. Thus, the University may be considered an essential partner in the endeavor of shaping the future.

25. The World University

On the occasion of several workshops organized in 2013 in different universities in the United States, Canada and Europe, the World Academy of Art and Science's Board of Trustees discussed the project of a Virtual World University, to be undertaken by the World University Consortium (WUC).¹⁷

This idea is not new, it belongs to the founding fathers of Academy – Einstein, Oppenheimer, Fleming – but 60 years ago this generous idea seemed like a dream. The fast success of the MOOCs platform launched by a few of the prestigious US universities like Berkeley, Stanford, Harvard and MIT, as well as the recent MOOCs created in Europe and Asia gives us the reason to believe that it may become a reality now.¹⁸

The main objective of a new World University, which now has the force of ideas to become a reality, is to create and implement a new paradigm in higher education and, through it, in the global culture and civilization. It has to start from new concepts, new methods, and new perspectives.¹⁹ Redefining current academic courses in order to reflect the inter-disciplinary and trans-disciplinary perspectives goes hand in hand with the creation of a new human-centered global paradigm, and which opens a way to reach new fields of knowledge. As Garry Jacobs was defining this desideratum, “*A new paradigm based on ideas, principles and values appropriate to the 21st century can rapidly transform this world of pressing challenges into one of ever-expanding opportunities.*”²⁰

A world university seems to be the best instrument for such innovating perspectives if and only if we start by changing our rules.

A radical change of concepts through intellectual cooperation within a consortium representing diverse directions and practices is imperative because the concept of higher education of a single country cannot be imposed as a world standard for long. Promoting diversity of ideas and perspectives is one of the biggest missions of contemporary education. As it is so rightly said in the WAAS manifesto, “it is essential that world education be adapted in order to reflect the different insights of different cultures”. If sciences of nature and technology impose English as the *lingua franca*, and if it is accepted for efficiency reasons, humanities will have to show care towards different cultures, the World University should avoid not becoming a new channel for homogenization, which would be even more dangerous, because it does not only address to a population already subjected to homogenization through TV or the Internet, but especially to the future elites responsible for preservation and development of national identities.

Essential for the World University project are its aims and objectives. This project should be directed to diminishing the gaps in education, especially concerning its quality, financial capacities, research and innovation.

Taking into account the fact that we cannot realistically hope to ensure soon enough the necessary estimated at around 350 million seats in the existing conventional higher education institutions, a radical change of means is imperative. Heitor Gurgulino de Souza, the new President of the World Academy of Art and Science (WAAS), was drawing attention to the fact that in Brazil 7.1 million young people graduated from secondary school. State universities can provide places for half a million students, and private universities have

around 2 million places, with students having the obligation to pay taxes. What will happen to the others who would like to continue their studies in universities? It is estimated that Brazil, a country with rapid economic growth, urgently needs 150,000 engineers and 175,000 professors to teach in the fields of physics, mathematics, chemistry and biology. Changes seem even more amazing worldwide. According to the data provided by Angel Calderon, the number of students enrolled in higher education is due to grow from 99.4 million in 2000 to 414.2 million in 2030, which would represent an increase of 416%. The decreasing cost of *on-line* education might offer the World University the possibility to create a set of original basic courses, accessible to a greater and greater number of beneficiaries.²¹

One of the main inconveniences of the transition towards a New Society is the constantly growing gap between the quickening pace of the technological progress and the reduced pace of the cultural evolution. I believe that a World University, open and accessible, promoting new concepts and a new paradigm in higher education, may become an essential step for a new humanism, based on essential values of freedom and equality, opening new perspectives to, potentially, millions of young persons all over the world, and finding a way to a fundamental shift in education: from a utilitarian enrolment in a system which pours information in innumerable vessels, to an authentic process of modeling personalities, a new form of the ancient notion of PAIDEIA, a formative process meant to create true citizens and noble members of humanity for a new millennium.

26. Democratization versus Massification

One of the most noxious illusions of the present times is misinterpretation of mass education as the democratization of the educational system. In Romania, as probably in the majority of the countries of the former Socialist space, we have already passed through the experience of cultural massification through a distorted and at the same time under-financed educational system, with pupils and students trapped in an equalizing assessment mechanism, which systematically neglected theoretical and human sciences for the exclusive benefit of narrow practical occupations. You cannot imagine the despair many of us feel when seeing how the same errors, generating harsh errors as consequences, are now being repeated in the name of the “knowledge-based economy” and of a laxity taken as democratization.

A crucial question for a new World University to answer is how to support the **democratization** of education without enhancing at the same time its **massification**.

We have inherited and are currently using a mould, so to say, of the general education system, which was imagined and put to use, in its essence at least, in the 19th century. Then, the industry needed workers with a generalized primary education: no more, but also no less. Secondary education comprised elites of around ten percent from each generation, mostly of males, and higher education marked the five percent of the ten percent who benefited from a college education. However, history shows that this tiny proportion of highly educated people ensured the explosion of theoretical and applied sciences which founded the modern world.

Nowadays, the new economy needs workers with secondary school and higher education studies, which require at least three years of university. Does that also mean that they should resume being a poor copy of their elders, with a shallow and superficial access to the

fundamental superior knowledge? Does that mean that, if they are computer-literate, they may well be ignorant in a traditional sense – not reading literature, not understanding either mathematics or philosophy, unable to write without a computer corrector, they would be indifferent to beauty? Does that mean that they may wave away their civic rights and duties, mostly out of ignorance than of indifference?

I strongly believe that, if we leave the current trend of massification to invade the whole world of our schools and universities, we shall lose forever all the benefits that the democratization of the educational process has offered humanity in the last two centuries.

A democratic society does not deny or dissolve its elites, but uses them for the common good, making them accessible to any citizen willing to use their talents and abilities in order to reach as far as possible the road chosen.

27. University and Politics

At first glance, it would seem that there are almost no points of encounter between these areas. In my opinion, university and politics are not two completely separate worlds, lacking in connections and interactions. And I say that from my personal experience; and I think I can prove the existence of intimate and extremely powerful links between academia and the political field.

If a universitarian has a duty to educate new generations, a politician bears responsibility for making decisions involving the community's destiny. The two therefore meet through the responsibilities assumed for the future, which will always have the altitude of those who imagine it.

I think, therefore, that politics should be inspired by science, which it can learn from. Any science is organized around common values such as dialogue, exchange of ideas, and respect for the truth. Any science maintains a certain strong connection with time. Through this particular relationship between people and time, science may offer politicians an example to follow. Citizens should not only submit to consequences of time passing, not only be the subject of time; they should give value and measure to their time.

Today, when science and high technology make people feel closer and closer, politics cannot aim to separate them. Science gives us the opportunity to share a common language. The scientific community transcends natural borders and boundaries and, therefore, the academic milieu, through its cohesion and effervescence, might be regarded as a forerunner and a model for cooperation, with no exclusion and marginalization. Through its universal character, ease of communication and mutual understanding, through its continuous need for relating to and involving in the overall effort, the scientific community may become an example par excellence of the projects which set as its aim to create unity in diversity. Intellectual solidarity may be the groundwork for building a new European and world political architecture.

A place of exchange and debate of ideas, the University reunites men and women from different places and times in the same intellectual Republic, in the same spiritual resonance box. Encouraging freedom of expression and intellectual debate, the University has the power to disseminate these values beyond the walls of university campus, to engrave them in

people's consciousness and behavior. The University has the merit of proposing to the society a certain way of conceiving the human being and human relations. Thus, values that first flourished within the University have gradually become core values of the modern era and the era of democracy. Democratic society is not an abstract society; it gives a better visibility to real man and polarizes its efforts for his own benefit. In such a society, the University has the privilege to propose models and solutions, to build and promote a new prioritization of values, appropriate for the challenges of a time which becomes a time of rapid changes.

The University may offer debates and political confrontations a model of authentic and balanced dialogue. And that is because ideas do not circulate in a hostile competition within the University walls; they are not mutually exclusive, nor do the ephemeral fireworks of election campaigns of opinions or routine celebrations live. Here, ideas meet the dialogue with warm fervor and peace, still refusing to exclude the cold war of ideologies. Within the University walls, ideas are backed by arguments; they take shape and substance; they are examined, accepted or rejected. Inside the University, educating does not merely mean dominating the one who listens, but patiently building the core of human personality, a patience political action does not have.

Does the University have anything to learn from Politics? Certainly. Representatives of the academic milieu can learn from the successes and especially the losses occurring in the political sector on how to become more cautious in proposing political, economic or social projects for which there are no serious impact studies and others are in charge to make these studies, not them. From statesmen's experience, academics may learn the meaning of taking responsibility for decisions concerning life, freedom and sometimes even the death of millions of people, and that could bring the decay, the birth or the progress of some countries. And above all that, for these decisions statesmen could pay with their career, freedom or even their own life.

28. University and Morals

It is often said that universities have shaped the destiny of nations, starting with the European Middle Ages, even more than sovereigns of kingdoms and presidents of republics did. In the paragraph dedicated to the University-Politics relationship I have recalled, with the pride of those grown in the academic milieu, how values of democracy first flourished in the academic environment, and then have been disseminated in peoples' consciences and behavior. But has it always been like this?

In a fair assessment of 20th century history, how could we leave out the fact that during its first half anti-Semitism firstly "blossomed" in the great University of Vienna, was then followed by the murder of a Jewish professor on the University steps; or that in 1938 students of the Humboldt University in Berlin burned dangerous books in the square in front of the Faculty of Law, which led to the terrible fulfillment of Heinrich Heine's prophecy: "Where they burn books, they will burn people, too" through the Holocaust drama? Could we forget that Lenin's diabolical mind was "educated" in the universities in Germany and Switzerland, that Hitler was fond of classical music and painting and that Stalin was a graduate of the Theological Seminary – the most bloodthirsty criminals of history? Closer to our times, could we forget that bloody dictators such as the Albanian Enver Hoxha or the Cambodian Pol Pot were "educated" in universities in France? Not to mention the way Soviet KGB in

collaboration with the local political police has implemented in Romania a reeducation system based on physical and psychological terror on students, turning them into tortionaries with the terrifying “Pitesti experiment”, in order to prepare the Communist society for the “New man”.²²

Are Universities to be blamed? Of course not. Because during the sinister Communist dictatorships in Eastern Europe, universities remained the only oasis of intellectual and civic resistance. How many of us remember today that the first major manifesto against communist terror on intellectuals, *Charter 77*, was originally a protest against dissolving the Jazz Department within the Prague Conservatory by the Czech Communist Party? And how many of us have begun to forget 25 years after the collapse of these dictatorships, the diligence the young students of the University of Bucharest showed on December 21st, 1989 after the massacre in Tiananmen Square happened earlier that year, in August, to face Ceausescu’s regime with bare hands and chanting *Freedom, Democracy, Freedom of Press!* and that dozens of them were shot or tread by tanks of the dictatorship repression troops?

We can understand one fundamental truth from all these tragic events: that the relationship between the University and Politics cannot be separated from the University-Moral relationship.

As science develops, the University-Moral relationship becomes more and more complex. In a previous paragraph, I have proposed science as a possible model for the 21st century world politics. However, science to be accepted as a potential model for politics should be accompanied by a warning. If utopia is for science the “mother of progress”, when we talk about politics, utopia was, with no exception in the last hundred years, the “mother of criminal Communist dictatorships”.

“Philosophy can prove anything, even to make the killers become judges”, Albert Camus found after the horrors in the first half of the 20th century.²³ The 20th century’s bloody history abundantly proved this truth and it is because of that any global political paradigm for the 21st century should take into consideration the complexity of human nature.

I also believe that scientists, before hurrying to give advice to politicians, should tackle with courage the difficult moral controversies progress creates “in their very gardens.” We should never forget the advice of Voltaire, the Illuminist: “Science without conscience is but the ruin of the soul.” In a new society, Universities have the duty to exercise their role as guardian of “science’s quality” they assumed since their foundation, as well as the guardian of “scientific consciousness”.

29. University in the ‘Lie Society’

More and more historians, philosophers, sociologists, and political scientists consider that the society we live in is a ‘Lie Society’. Sociologist Robert Hettlage even believes that we live in a “cohabitation accustomed to lie” and identifies more than sixty ways to lie, which are frequently applied nowadays.²⁴ But of course, not all of them seem to be of appropriate interest to the subject approached and there is no point in referring to what covers the sphere

“Any global political paradigm for the 21st century should take into consideration the complexity of human nature.”

of politeness, poly-significance, semi-truth, children's plots or grown-ups' everyday tricks. I am here considering the lie from the spheres of political and economic decision, such as political honesty, keeping compromising secrets, statistical deception and media manipulation which can easily change peoples' way of living and their value system. Not to mention the maneuvers of deceiving the public through mass media commercials or by miming the "free exchange of views" during political debates leading the value of truth to ridicule. Noam Chomsky warns that a corrupt and unfunctional education system is the ideal instrument for keeping citizens ignorant and to manipulate public opinion at its own convenience.*

We, the ones in Eastern Europe, who have lived the majority of our lives under the Communist dictatorship, know that this pictures a lying system maintained on terror. We are now confronted with a surprising "creative" approach of lies in democratic politics and in the market economy, which seems to be more dangerous than the official Communist lie, that few believed in anyway, and absolutely no one in the academic environment. Even though, sometimes, the professors were forced to broadcast that, they knew too well that those who listened did not believe it.

Extremely serious is for me the intrusion of lie in the academic environments. Also we, the academics that passed through the Communist system, understand what may be pleaded as a "positive manipulation" in democracy. Well-intentioned politicians, but dependent on votes, may be compelled to fabricate spatial myths, climate scenarios or social catastrophes in order to support investments in scientific research areas of major interest. This approach is eventually convenient and profitable to all on a long-term.

But what about the truth? German historian Wolfgang Reinhard, who introduced the concept of the *Lie Society* (eine Lügen Gesellschaft) and analyzed its different facets, wrote two theses.²⁵ The first one regards the expansion of lies in today's modern society, where "the untruth proves itself not only to be usual and necessary, but even friendly to men". The second one is the thesis of complicity in lieu of the ones lying and the ones being lied to, according to which, the leaders' political lie is just a part of the lie including all. The conclusion: within this type of social configuration, skeptical, analytical and self-critical people are removed right from the start as being unable for the political game. If this is the case in the society, how does it work in the University?

For the past few years, I cannot help but notice a reduction or sometimes even an almost complete lack of critical analysis of assumptions, that much rapidly changed into axioms just because politicians converted them into slogans that lead to popularity, multinational commercial companies used them in profitable businesses, mass media presented them as successful stories that led to audience and incomes form publicity, and the civil society made them popular by using mobilizing manifestations over the Internet and through mass meetings. Universities also take part in this "feast" that offers them money for research, conferences, new subjects and courses, and a visibility in the public space, which they did not have before.

We like stating that Universities are a citadel of science. Natural sciences or humanities do not bear any other purpose than finding the truth. And then how will we justify if some of

* Noam Chomsky, well-known American linguist, professor emeritus at Massachusetts Institute of Technology (MIT), formulated "10 strategies of manipulation by the media" on which is based the political power in lack of legitimacy, which he calls strategies of distraction, among which are: people should not have access to complete, accurate, right and objective information means. People should have their minds busy with something else than their real problems and have a way of thinking that would not allow them to see the connection between causes and effects.

the new assumptions, grounded more on global statistics or, on some relevant, but isolated, cases, do not get confirmed? What if the positive effects, that are visible today, are followed by short term or long term harmful side effects or by the creation of some unexpected imbalances? What will be our reaction to those who are now questioning the “fashionable” theories? Are we to expect a new “Trial of the Apes”? A few isolated cases of marginalisation in the scientific environment of those questioning the “main trend” are already buried in a shameful silence. His Holiness Pope Benedict XVI reminds us that trust in the human capacity for searching the truth, to find the truth and to live according to the truth has led to the foundation of great European universities. Today we must utter again this thing in order to offer the intellectual community the necessary courage to develop a new future of real welfare, a future for real respect of the human being.

Wolfgang Reinhard is offering us even a personal way out of this “Lie Society” that has created so many unexpected complications: “When no one else can tell us what truth is, we can at least learn what the truth is not”. In this situation, we are only left to present ourselves with a clear conscience, as witnesses of reality.

30. Reconsidering the Academic Speech

The way you talk and write defines you. It is the very reason that makes me firmly believe that contemporary society needs a rehabilitation of the academic speech, not only through its rhetoric, but also through the approach of phenomena. The academic speech is different from the political, economic or theological ones. The political speech is, by nature, directed either against opponents or at glorifying its own achievements for propaganda purposes. The economic speech analyzes reality in terms of efficiency and profit. The theological one, based on faith, promotes an undeniable divine truth. Unlike all these, the academic speech forces you to consider opposing views and urges you to take into account also negative side effects of positive phenomena or, on the contrary, positive side effects of negative phenomena. The academic speech stands out from her sister, scientific communication, because it is not the novelty of discovery, but reflection upon it, which becomes a priority. Therefore it is only at the end of a long road, starting from scientific research in a specialized field towards the philosophy of science and then to the philosophy of life it is fulfilled. Its rigor forces you to avoid conformism and negativism, emotional excitement, vulgarization and populist concessions.

The trend of making up the reality, seen in many speeches circulated in public space, comes either from the pressure of contemporary bureaucracies to present the *politically correct* clichés, a modern version of the wooden language used during the communist dictatorships, or from the preference of some civil society organizations for catastrophic scenarios, which are favored by media. The choice for the *Academic speech* emphasizes a cultural approach, opposite to simplifications, partisanship or to the arrogance of holding the unique truth. It detaches itself also from the motivational speech pattern, dedicated to rapid methods for obtaining success in career and society. Many of my former students, now scattered throughout the world, remember, perhaps, how I concluded the annual courses of the Faculty of Geology warning them that science promises us neither wealth nor happiness. It promises only the truth. I am convinced now, as I was at that time, that this relentless search for truth in a society which increasingly becomes a society of organized lie and of fierce fight for power and profit is the one that can offer us freedom and self-respect.

31. Preservation of Ethical Values

Now, at the beginning of the millennium, when we are aware more acutely of the risk of depersonalization in a globalized world of computerized information, which is often anonymous, the University apprehends to assume the mission of replacing the human being. Tried by the swirl of so many anti-human projects and realities, man comes again to the foreground of options, regaining its statute of favorite subject and the object of reflection.

“The global financial crisis may be a historic opportunity for a new political project of organizing the contemporary globalized society.”

When I refer to the preservation of universal values, I am thinking that traditionally, politics as an art of the possible is seen in an unequivocal relationship with conjectural present. On the other hand, the academic community is less related to the present, the matter it works with being mostly past and future – a past and a future taken together and somewhat inseparable. And yet, I think I can assert that a possible and necessary conjunction exists between politics and University, understood as immediate purpose, and the relationship of science with an ever present time. Being forced to face the present, politics is obliged to understand and analyze the past in order to be able to imagine the future.

Exclusion, conflict and intolerance cannot be part of a project for the future. Forerunner of the medieval university, Saint Bernard of Clairvaux, said that the past, present and future do not exist as such. Only memory, action and project truly exist. Memory, enlightened by truth and wisdom, may inspire positive energies for action, for a project of the future we aspire to.

32. Managers and Leaders

In order for higher education to answer the great challenges the 21st century democratic societies are facing, we need good managers of the present educational system, and leaders able to change the present educational system. But even more is needed.

Experts and politicians have been looking for solutions to make the current economic and political system survive in the current period of the economic and financial crisis. However, the global financial crisis may be a historic opportunity for a new political project of organizing the contemporary globalized society. It is time for representatives of academic milieu, and businessmen and politicians, freed from the pressures of obtaining profit or popular votes, to build a new cultural project to meet the 21st century uncertainties.

The main difference among political systems lies today in how they can manage uncertainty. They can assume it by trying to find solutions through a dialogue, or can try to eliminate it through the dictate of ideologies, religions or money. Managing uncertainty can be done only in an open society. From the confrontation with high stakes could emerge a behavior meeting the challenges of reality through respecting principles. When we cannot act motivated by the certainty of success, we can act from the consciousness of duty. This concept corresponds best to what politics should be in a knowledge-based society and in the globalized world: a complex vision of the future, based on a new dialogue about human values.

33. To have – To be

Over two millennia ago, the Argonauts' journey to Pontus Euxinus in search of the "Golden Fleece", looking for material wealth, inspired them to act and offered them the perspective of another world, different from the one of the Aegean Sea where they were living. The legend does not say whether they won anything from this journey. But later, the same Greeks wrote on the Apollon's Temple in Delphi "*Gnothi seauton*", *know yourself*. The concept of Academia was founded by Socrates in order to preach this principle to young people who were eager to learn.

I started my tryst with the University when I wasn't even 17 and did not leave it until 75, not even during the four years when I had responsibilities in the public space. I went through all stages, from student to professor and rector and I owe it all I am now. University is for me a fundamental landmark and a hope, in a world torn between, on the one hand, an exceptional progress of science and technology and, on the other hand, a visible spiritual and moral degradation.

I believe that the lack of real solution for the global financial crisis forces us now brutally to choose between **to have** and **to be**.

A higher education based on moral values may create for the democratic 21st century world, a new balance between power and knowledge, which would reshape a framework inside which each individual cannot only *be*, but also *become*.

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Notes

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